# COAL FATAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

REPORT OF FATAL ROOF-FALL ACCIDENT
NO. 31 MINE
PEABODY COAL COMPANY
KENVIR, HARLAN COUNTY, KENTUCKY
(Accident Occurred in Lee County, Virginia)

January 21, 1955

By

Brooks Blackwood and Robert B. Perry Federal Coal-Hine Inspectors

Originating Office - Bureau of Mines
Health and Safety Activities
District C - Barbourville, Kentucky
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#### INTRODUCTION

Ned Montgomery, employed as a shuttle-car operator in the No. 31 mine, Peabody Coal Company, was killed instantly by a fall of rock at about 11:28 a.m., Friday, January 21, 1955. The accident occurred in the portion of the mine property that is in Lee County, Virginia. It occurred about 28 feet from the face of a crosscut between two rooms that were being driven into a barrier pillar of 3 right main off 13 right entries. A representative of the Bureau of Mines was notified of the accident at 1:20 p.m., January 21. An investigation was started the same afternoon, and it was completed on January 24, 1955.

Montgomery was 43 years old and had 12 years mining experience; the last 10 years of which were operating a shuttle-car at this mine. He is survived by his widow and three dependent children.

#### GENERAL INFORMATION

The No. 31 mine is at Kenvir, Kentucky, with active workings in both Lee County, Virginia, and Harlan County, Kentucky. The mine was opened by drifts in the Darby coal bed, which average 38 inches in thickness in the active workings. A total of 200 men was employed, of which number 170 worked underground on 2 shifts a day. About 99 percent of the average daily production of 1,800 tons of coal was loaded mechanically. The life of the mine was estimated by the management to be 6 years. The last Federal inspection of the mine was completed October 21, 1954.

The mine was developed by a room-and-pillar method. Entries were driven in sets of two, three, five, or eight, and room entries were turned at 500- and 625-foot intervals. Entries were 16 to 22 feet wide, and rooms were 16 to 30 feet wide. Crosscuts were about 60 feet apart.

Pillars were being recovered without regard to a system where the accident occurred. The immediate roof in the area was laminated shale, coal, and sandrock, and other formations.

The adopted plan for systematic roof support required permanent posts to be set on 4-foot centers on each side of the tracks or shuttle—car roadways, and safety posts be set between each workman and the face. Additional posts or cross bars were to be set where necessary. The plan was followed in the section where the accident occurred. The roof, however, was in a general movement at the time of the investigation. It was, therefore, impossible to make a close examination of the area involved and to make an accurate sketch to show the location of the pillars and timbers. There had not been a general pillar fall, and pillar stumps were observed standing in the mined out area.

Coal was transported in cable-reel shuttle cars from the faces to a mine-car loading point on the 3 right entry.

Information for this report was obtained from an investigation at the scene of the accident and from George E. Strunk, section foreman.

The investigating committee consisted of:

# Peabody Coal Company

H. T. Barton
John Foy
George E. Strunk
William Stapleton

General Mine Foreman Night Mine Foreman Section Foreman Night Section Foreman

# Division of Hines, Virginia Department of Labor and Industry

James E. Cox

Inspector

# United States Bureau of Mines

Brooks Blackwood Robert B. Perry Federal Coal-Mine Inspector Federal Coal-Mine Inspector

#### DESCRIPTION OF ACCIDENT

The accident occurred in the first crosscut between Nos. 1 and 2 rooms in 3 right main barrier pillar off 43 right main entries. The crosscut was driven from the No. 1 room side and had made a connection at the face of No. 2 room. A cut of loose coal was left at the face of the working place. The loading machine was trammed into the working place about 11:00 a.m., and nine shuttle cars of coal were loaded therefrom prior to the accident. At about 11:25 a.m. Montgomery

(victim) placed the shuttle car he was operating under the boom of the loading machine. A small amount of coal was loaded into the car when apparently a small roof-bump occurred in the area and caused a piece of rock to fall from the roof. The falling rock caught and crushed Montgomery against the shuttle car as it fell. Strunk, section foremen, was in the working place at the time and was standing near the loading machine when he became aware that Montgomery's light was no longer visible over the shuttle car. He investigated promptly and found the victim under the fallen rock. Power was cut off the shuttle car immediately and the loading-machine operator was signalled to stop the loading machine. The victim was removed from under the rock shortly thereafter and transported to the surface.

The rock that fell was 14 feet long, 8 feet wide, and varied from a featheredge to 10 inches in thickness. Four timbers, which had been under the rock that fell, were dislodged by the fall and caused the rock to pitch toward the shuttle car.

The foreman stated that he had examined the roof along the roadway and the face area shortly before the loading machine entered the place, and that the roof appeared to be in a safe condition.

## CAUSE OF ACCIDENT

The direct cause of the accident was a roof fall induced by a small roof bump. Removing pillars without any regard for a systematic method of pillar recovery was a contributing factor.

#### RECOM ENDATIONS

The following recommendations, if properly applied, may prevent similar accidents in the future:

- 1. Roof bolts should be used for supports in the area where the accident occurred because complete pillar extraction was not practiced.
- 2. Where pillars are being mined or are to be mined, a system of pillar extraction should be adopted and followed that will maintain a regular line of extraction.
- 3. In pillaring, the blocks of coal should be mined in proper sequence so as to establish and maintain straight clean break lines close to the pillars being extracted.

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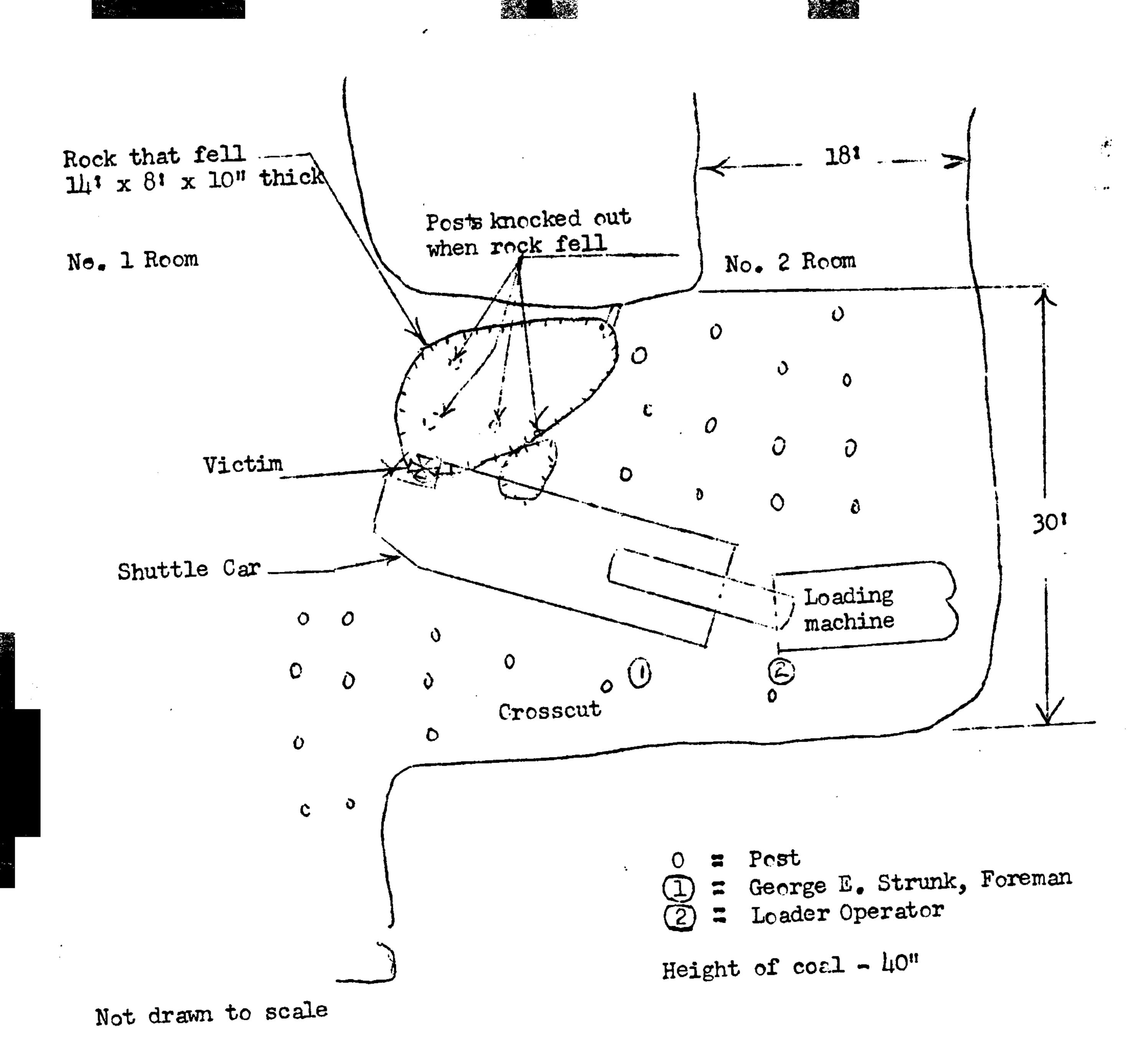
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# FATAL ACCIDENT DATA

l.	Daily employment 200 Time of accident 11:28 a.m. 1-27-55
2.	General location of accident Roadway 28 feet outby face of crosscut
3.	Job when injured Shuttle-car operator Regular job Same
4.	Age 43 Years experience regular job 10 In mines 12
5.	Dependents: Widow X Number of children under age 18 3 Others
6.	Method of loading in place where accident occurred: Mechanical
7.	Location: Shuttle-car roadway
8.	Type of permanent support in use at location where accident occurred: Posts
9.	Type of temporary support in use in place where accident occurred: Posts
10.	Did injury occur inby last permanent roof support? No
11.	Distance from last supports to face: Permanent 87 Temporary 47
12.	Was standard support plan adopted? Yes Was it followed in this place? Yes
13.	Last prior visit by mine official: Present
14.	Approximate dimensions of fall in inches: Length 168 Width 96



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